Sharon M Crook

List of Publications by Year
in descending order

54	1,251	623734	434195
papers	citations	14 h-index	31 g-index

60	60	60	1357
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	International data governance for neuroscience. Neuron, 2022, 110, 600-612.	8.1	28
2	A stage-structured population model for activity-dependent dendritic spines. Journal of Biological Dynamics, 2021, 15, S62-S80.	1.7	1
3	Modeling the synergistic properties of drugs in hormonal treatment for prostate cancer. Journal of Theoretical Biology, 2021, 514, 110570.	1.7	6
4	A multiscale continuum model of the vertebrate outer retina: The temporal dynamics of background-induced flicker enhancement. Journal of Theoretical Biology, 2021, 525, 110763.	1.7	1
5	Editorial: Reproducibility and Rigour in Computational Neuroscience. Frontiers in Neuroinformatics, 2020, 14, 23.	2.5	8
6	Review: Mathematical Modeling of Prostate Cancer and Clinical Application. Applied Sciences (Switzerland), 2020, 10, 2721.	2.5	26
7	Using formative assessment for improving pedagogy. ACM Inroads, 2020, 11, 27-34.	0.6	2
8	Open Source Brain: A Collaborative Resource for Visualizing, Analyzing, Simulating, and Developing Standardized Models of Neurons and Circuits. Neuron, 2019, 103, 395-411.e5.	8.1	56
9	Harmonizing semantic annotations for computational models in biology. Briefings in Bioinformatics, 2019, 20, 540-550.	6.5	52
10	Resources for Modeling in Computational Neuroscience. Springer Series in Computational Neuroscience, 2018, , 807-830.	0.3	1
11	Towards systematic, data-driven validation of a collaborative, multi-scale model of Caenorhabditis elegans. Philosophical Transactions of the Royal Society B: Biological Sciences, 2018, 373, 20170381.	4.0	7
12	SwarmSight: Measuring the temporal progression of animal group activity levels from natural-scene and laboratory videos. Behavior Research Methods, 2017, 49, 576-587.	4.0	9
13	SNaReSim: Synthetic Nanopore Read Simulator. , 2017, , .		6
14	SwarmSight: Real-time Tracking of Insect Antenna Movements and Proboscis Extension Reflex Using a Common Preparation and Conventional Hardware. Journal of Visualized Experiments, 2017, , .	0.3	2
15	Neuronal network models for sensory discrimination. , 2016, 2016, 1066-1073.		0
16	25th Annual Computational Neuroscience Meeting: CNS-2016. BMC Neuroscience, 2016, 17, 54.	1.9	81
17	Modeling the Influence of Ion Channels on Neuron Dynamics in Drosophila. Frontiers in Computational Neuroscience, 2015, 9, 139.	2.1	16
18	Ontology-assisted keyword search for NeuroML models. , 2015, , .		7

#	Article	IF	Citations
19	Drift-diffusion simulation of the ephaptic effect in the triad synapse of the retina. Journal of Computational Neuroscience, 2015, 38, 129-142.	1.0	20
20	An Animated Introduction to Relational Databases for Many Majors. IEEE Transactions on Education, 2015, 58, 81-89.	2.4	11
21	libNeuroML and PyLEMS: using Python to combine procedural and declarative modeling approaches in computational neuroscience. Frontiers in Neuroinformatics, 2014, 8, 38.	2.5	35
22	LEMS: a language for expressing complex biological models in concise and hierarchical form and its use in underpinning NeuroML 2. Frontiers in Neuroinformatics, 2014, 8, 79.	2.5	109
23	Model exchange with the NeuroML model database. BMC Neuroscience, 2014, 15, .	1.9	4
24	Fixational Eye Movement Correction of Blink-Induced Gaze Position Errors. PLoS ONE, 2014, 9, e110889.	2.5	41
25	Relating ion channel expression, bifurcation structure, and diverse firing patterns in a model of an identified motor neuron. Journal of Computational Neuroscience, 2013, 34, 211-229.	1.0	22
26	A continuum approach to model neurites/dendrites with emerging subtrees. BMC Neuroscience, 2013, 14, .	1.9	0
27	Learning from the Past: Approaches for Reproducibility in Computational Neuroscience. , 2013, , 73-102.		34
28	Microsaccadic Efficacy and Contribution to Foveal and Peripheral Vision. Journal of Neuroscience, 2012, 32, 9194-9204.	3.6	120
29	Creating, documenting and sharing network models. Network: Computation in Neural Systems, 2012, 23, 131-149.	3.6	14
30	The Open Source Brain Initiative: enabling collaborative modelling in computational neuroscience. BMC Neuroscience, 2012, 13, .	1.9	18
31	A declarative model specification system allowing NeuroML to be extended with user-defined component types. BMC Neuroscience, 2012, 13, .	1.9	1
32	Motoneuron model of self-sustained firing after spinal cord injury. Journal of Computational Neuroscience, 2011, 31, 625-645.	1.0	15
33	Differential contribution of A-type potassium currents in shaping neuronal responses to synaptic input. BMC Neuroscience, 2011, 12, .	1.9	0
34	Development of NeuroML version 2.0: greater extensibility, support for abstract neuronal models and interaction with Systems Biology languages. BMC Neuroscience, 2011, 12, .	1.9	3
35	Modulation of inhibitory strength and kinetics facilitates regulation of persistent inward currents and motoneuron excitability following spinal cord injury. Journal of Neurophysiology, 2011, 106, 2167-2179.	1.8	25
36	Differential contribution of voltage-dependent potassium currents to neuronal excitability. BMC Neuroscience, 2010, 11, .	1.9	2

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37	NeuroML: A Language for Describing Data Driven Models of Neurons and Networks with a High Degree of Biological Detail. PLoS Computational Biology, 2010, 6, e1000815.	3.2	294
38	Describing and exchanging models of neurons and neuronal networks with NeuroML. BMC Neuroscience, 2009, 10, .	1.9	3
39	Predicting changes in neuronal excitability type in response to genetic manipulations of K+-channels. BMC Neuroscience, 2009, 10, .	1.9	1
40	Role of inhibition in the suppression of Î±-motoneuron hyper-excitability following chronic spinal cord injury. BMC Neuroscience, 2009, 10, P343.	1.9	2
41	Passive current transfer in wildtype and genetically modified Drosophila motoneuron dendrites. BMC Neuroscience, 2009, 10, .	1.9	1
42	Modeling structural plasticity in dendrites with multiple spine types. BMC Neuroscience, 2008, 9, P104.	1.9	0
43	Modeling the GABA and ephaptic feedback mechanisms in cat outer retina. BMC Neuroscience, 2008, 9, .	1.9	0
44	Computational Intelligence in Electrophysiology: Trends and Open Problems. Studies in Computational Intelligence, 2008, , 325-359.	0.9	2
45	Using NeuroML and neuroConstruct to build neuronal network models for multiple simulators. BMC Neuroscience, 2007, 8, .	1.9	1
46	Two-compartment models of spasticity in spinal motor neurons following spinal cord injury. BMC Neuroscience, 2007, 8, .	1.9	0
47	A model of activity-dependent changes in dendritic spine density and spine structure. BMC Neuroscience, 2007, 8, .	1.9	1
48	MorphML: Level 1 of the NeuroML Standards for Neuronal Morphology Data and Model Specification. Neuroinformatics, 2007, 5, 96-104.	2.8	73
49	XML for Data Representation and Model Specification in Neuroscience. Methods in Molecular Biology, 2007, 401, 53-66.	0.9	6
50	Tools for neuroinformatic data exchange: an XML application for neuronal morphology data. Neurocomputing, 2004, 58-60, 1091-1095.	5.9	9
51	Modeling ion channels from the cricket cercal sensory system. Neurocomputing, 2004, 58-60, 409-415.	5.9	0
52	Modeling frequency encoding in the cricket cercal sensory system. Neurocomputing, 2002, 44-46, 769-773.	5.9	2
53	Dendritic and synaptic effects in systems of coupled cortical oscillators. Journal of Computational Neuroscience, 1998, 5, 315-329.	1.0	44
54	Combining hypothesis- and data-driven neuroscience modeling in FAIR workflows. ELife, 0, 11, .	6.0	15